U7860-1A

February 1991 Vol. 46 No. 557

Business in Nebraska

In This Issue

Economic Projections 1
Another Look at the Recession 5
Nebraska County Population 10
Nebraska Highway Stats 12
County of the Month 12

Prepared by the Bureau of Business Research, 200 College of Business Administration, University of Nebraska-Lincoln, Lincoln, NE 68588-0406, 402/472-2334

Nebraska Economic Projections: Is A Recession Evident?

Sanath C. Jayanetti and Darnell B. Smith
Graduate Research Associates, Bureau of Business Research

Introduction

The most recent quarterly economic projections for Nebraska prepared by the Bureau of Business Research show that the current national recession is affecting the Nebraska economy only modestly. (The general definition of a national recession is two or more consecutive quarters of negative real Gross National Product (GNP). *Real GNP* is GNP adjusted for inflation).

Recent GNP figures indicate negative growth for the fourth quarter 1990. Consensus projections call for another decrease in the first quarter of 1991. Any predictions of the duration or depth of the present national recession are tenuous, at best, because of the Middle East crisis.

Opinion is divided about the direction of second quarter 1991 real GNP. If the national economy rebounds by midyear, Nebraska should escape any effects of the recession. A strong agricultural sector, especially the livestock industry, is propelling growth in other sectors of the state's economy. It is unclear, however, whether continued strength and support can be expected from agriculture.

Projections from the Quarterly Model

The Bureau of Business Research has been developing and refining a computerized economic projection model for Nebraska, the Nebraska quarterly forecasting model (NEQFM). This model has been operational for approximately six months. NEQFM is being used to assess the economy as well as to generate economic projections.

Some of the latest economic projections from the model are noted below. The complete projection series, including earnings, wages, and salary information is available from the Bureau of Business Research.

A more thorough explanation of how the NEQFM is constructed is presented on page 3.

Growth Impact of Recession

The latest BBR economic projections assume a short, shallow national recession and a return to growth by mid-1991. Any changes in the U.S. economic, political, or military scene (such as a longer and

State Economic Scoreboard

Change from same month one year ago

	State	Metro+	Nonmetro
Motor Vehicle Sales (October) Constant $	↓ -7.0%	↓ -12.0%	↓ -2.5%
Nonmotor Vehicle Sales (October) Constant $	↓ -1.0%	↓ -1.7%	↓ -0.2%
Building Activity (October) Constant $	↓ -5.8%	↓ -15.3%	↑ 5.7%
Employment (December)	↑ 3.5%	↑ 1.4%	↑ 5.7%
Unemployment Rate* (December)	↓ 2.0%	↓ 1.7%	↓ 2.2%

+Omaha and Lincoln. *Unemployment is this month's rate, not a percent change from year ago.

deeper recession or a rapid military escalation) could change our projections to a certain extent. The projections show a relatively flat but growing economy in Nebraska during 1991 and 1992. Although some sectors will be weak in the early quarters of 1991, gains later in the year will compensate for the slowdown.

Average annual total employment will continue to grow during 1991 and 1992. In 1992, employment will rise slightly more than 1.0 percent, resulting in an increase of about 7,100 jobs (computed from data in Table 1).

Inflationary pressure will precipitate slightly higher rates of increase in wages and salaries and personal income than in employment. Total wages and salaries are expected to rise approximately 4.1 percent in 1991 and 3.9 percent in 1992. Total personal income will increase approximately 3.1 percent in 1991 and 4.2 percent in 1992 (computed from data in Table 2).

Table 1
Nebraska Quarterly Forecasting Model
Nebraska Employment by Industry

Year and Quarter	Mining	Construction	Durables Manufacturing	Nondurables Manufacturing	TCU	Wholesale Trade
1990:1	1,320	22,704	46,763	48,936	46,407	54,085
1990:2	1,632	25,748	46,965	49,190	46,787	55,414
1990:3	1,704	26,663	46,689	50,203	46,855	55,348
1990:4	1,519	25,189	46,552	51,164	47,746	55,126
1991:1	1,332	21,796	46,062	50,154	46,901	54,474
1991:2	1,708	25,427	46,401	50,347	47,741	55,502
1991:3	1,831	27,474	46,306	50,829	48,380	55,555
1991:4	1,711	25,520	46,205	51,187	48,287	54,933
1992:1	1,450	21,215	45,966	50,107	47,506	54,294
1992:2	1,797	25,676	46,674	49,946	48,411	55,328
1992:3	1,894	27,710	46,730	50,634	48,984	55,386
1992:4	1,750	25,747	46,561	51,241	48,825	54,768
			Yearly Averages			
1989	1,503	23,864	46,494	48,322	45,810	53,328
1990	1,544	25,076	46,742	49,873	46,949	54,993
1991	1,646	25,054	46,244	50,629	47,827	55,116
1992	1,723	25,087	46,483	50,482	48,432	54,944

Year and Quarter	FIRE	Services	Federal Government	State & Local Government	Retail Trade	Total Employment
1990:1	48,421	169,951	17,704	126,209	129,567	712,067
1990:2	48,436	174,125	*19,143	129,815	130,761	728,016
1990:3	48,263	173,920	*19,278	123,184	130,966	723,073
1990:4	48,019	175,914	18,501	133,671	133,479	736,880
1991:1	47,845	174,471	18,358	127,471	128,428	717,292
1991:2	48,335	177,606	18,481	131,113	131,596	734,259
1991:3	48,863	177,981	18,395	124,416	132,543	732,572
1991:4	48,662	177,831	18,235	135,008	134,035	741,613
1992:1	48,641	176,924	18,110	128,746	130,025	722,984
1992:2	49,112	180,671	18,164	132,424	133,404	741,607
1992:3	49,564	181,210	18,159	125,660	134,255	740,187
1992:4	49,348	181,207	18,015	136,358	135,565	749,384
			Yearly Averages			
1989	48,331	167,247	17,689	122,800	130,276	705,672
1990	48,285	173,478	18,657	128,220	131,193	725,009
1991	48,426	176,972	18,367	129,502	131,651	731,434
1992	49,166	180,003	18,112	130,797	133,312	738,540

Source: Nebraska Department of Labor
TCU - Transportation, Communication, and Utilities
FIRE - Finance, Insurance, and Real Estate
*Increased employment in federal government during second and third quarters of 1990 were due to temporary census workers
Numbers in shaded areas are projections

The dollar volume of average motor vehicle retail sales will increase approximately 1.4 percent in 1991, while nonmotor vehicle retail sales will swell about 2.4 percent. Total retail sales will increase approximately 2.3 percent. In 1992, the growth rates for motor vehicle, nonmotor vehicle, and total retail sales will be 4.0 percent, 3.9 percent, and 3.9 percent, respectively (computed from data in Table 3).

Table 1 shows that employment will increase in most sectors from 1990 through 1991. Employment in durables manufacturing and the federal government, however, will decrease slightly. Most of the expected employment growth from 1990 through 1991 will be in the service sector.

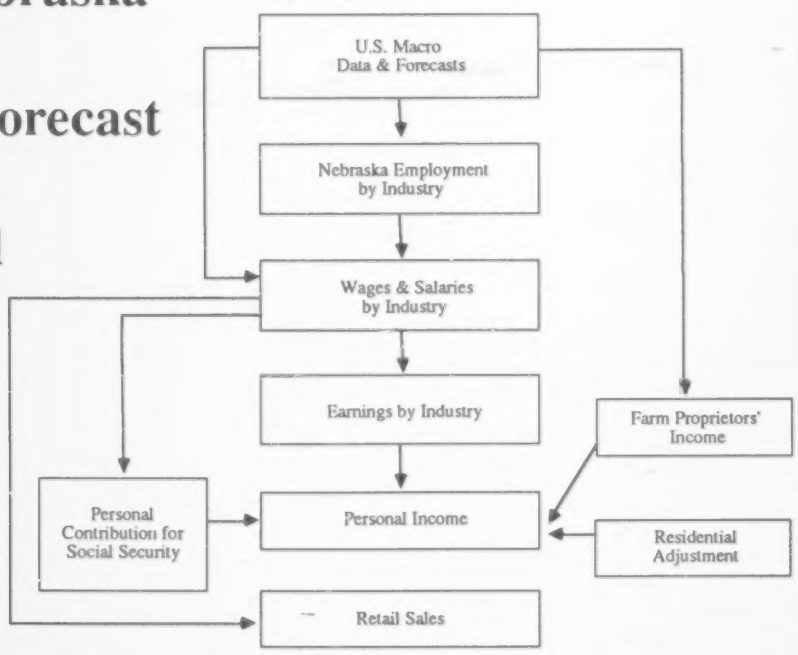
The service sector is an important growth area. Nebraska's service sector largely has been unaffected by previous national recessions. UNL research associate John Austin has noted that service employment sailed through the two recent recessions virtually unscathed.

Employment in nondurables manufacturing and the federal government also will decrease slightly from 1991 through 1992, according to the projections in Table 1. The decreases will be small and well within the error range for estimates. Thus, the projected employment decreases in the two sectors are not considered to be significant.

The encouraging assessment of the impacts of the national recession on Nebraska's economy is reinforced by recent simulations (including some

How the Nebraska Economic Quarterly Forecast Model is Constructed

Figure 1
Nebraska Model Flow Chart



The NEQFM begins with a national forecast based upon a U.S. macromodel. We currently are using the services of the WEFA Group, one of the nation's leading forecasting associations, for the national forecast. Today's WEFA Group was formed by the merger of two forecasting firms–Chase Econometrics and Wharton EFA. The WEFA Group prepares quarterly short-term projections and annual long-term projections from large scale econometric models.

Links have been constructed from WEFA forecasts to the Nebraska economy. For example, employment in Nebraska by industry is linked directly to employment levels, by corresponding industries, at the U.S. level. Nebraska industry employment also is affected by seasonal factors that are constructed for each industry and by other special factors unique to the Nebraska data.

Once a forecast of Nebraska industry employment is determined, it becomes a principal element in determining wages and salaries for the industry. The other principal determinant is the Consumer Price Index (CPI). The CPI uniquely affects the wage levels in each industry. Once wages and salaries are estimated, earnings by industry can be estimated. The difference between earnings (a personal income concept) and wages and salaries is other labor income and proprietors' income. Special steps have been built into the model to make the transition from wages and salaries to personal income.

A submodel is used to estimate net taxable retail sales in Nebraska. There are two elements in the submodel: motor vehicle sales and nonmotor vehicle sales. (Food was dropped from taxable sales in October 1983.)

Table 2
Nebraska Quarterly Forecasting Model
Nebraska Personal Income

Year and Quarter	Other Labor Income	Nonfarm Proprietors' Income	Farm Proprietors' Income	Personal Contribution for Social Insurance Income	Dividends, Interest, and Rent	Transfer Payments	Residential Adjustment	Total Personal Income
1990:1	1,281	2,312	2,334	1,465	4,578	3,831	-360	26,701
1990:2	1,314	2,334	1,919	1,480	4,597	3,851	-371	26,743
1990:3	1,331	2,354	1,280	1,502	4,644	3,906	-374	26,402
1990:4	1,357	2,357	1,610	1,506	4,649	3,955	-376	27,084
1991:1	1,365	2,354	1,549	1,543	4,743	4,053	-378	27,256
1991:2	1,370	2,382	1,739	1,555	4,748	4,083	-380	27,547
1991:3	1,378	2,422	1,435	1,570	4,832	4,123	-382	27,489
1991:4	1,394	2,471	1,575	1,587	4,913	4,161	-385	27,966
1992:1	1,414	2,523	1,428	1,628	4,994	4,251	387	28,212
1992:2	1,423	2,580	1,595	1,645	5,077	4,293	-390	28,647
1992:3	1,439	2,640	1,271	1,664	5,181	4,345	-393	28,701
1992:4	1,459	2,701	1,401	1,684	5,297	4,396	-397	29,272
				Yearly Totals				
1989	4,865	8,830	6,158	5,543	17,526	14,332	-1,387	99,542
1990	5,283	9,357	7,143	5,953	18,468	15,543	-1,481	106,930
1991	5,507	9,629	6,298	6,255	19,236	16,419	-1,525	110,258
1992	5,736	10,444	5,695	6,621	20,549	17,284	-1,567	114,832

Source: U.S. Bureau of Economic Analysis
Figures in $ millions, seasonally adjusted at annual rates
Numbers in shaded areas are projections

simulations conducted prior to the onset of the recession). Both the simulation analyses and the latest projections indicate slow but steady growth in employment, wages and salaries, and personal income in Nebraska.

To conclude, simulation analyses and current model projections show that the national recession will have isolated negative impacts on Nebraska's economy. The impacts appear to be relatively minor; the most troublesome effect will be a decrease in short-term growth rates. No significant downturn in Nebraska's overall economic activity resulting from the national recession is foreseen at this time. If the state's economy suffers a downturn, it likely will be due to either a downturn in the agricultural sector or longer than expected military involvement in the Middle East. A full scale land war with high casualties easily could alter the course of the national recession and have a greater negative impact on the state's economy.

Table 3
Nebraska Quarterly Forecasting Model
Nebraska Retail Sales

Year and Quarter	Motor Vehicle	Nonmotor Vehicle	Total Retail Sales
1990:1	120,744	839,201	959,945
1990:2	141,206	909,897	1,051,103
1990:3	135,989	898,476	1,034,465
1990:4	111,222	952,430	1,063,652
1991:1	120,865	849,209	970,074
1991:2	137,030	923,564	1,060,594
1991:3	135,740	934,057	1,069,798
1991:4	122,426	980,939	1,103,364
1992:1	127,589	882,299	1,009,888
1992:2	140,853	957,805	1,098,658
1992:3	140,426	971,212	1,111,637
1992:4	127,574	1,019,415	1,146,989
		Yearly Totals	
1989	504,181	3,381,267	3,885,448
1990	509,161	3,600,004	4,109,165
1991	516,061	3,687,769	4,203,830
1992	536,442	3,830,731	4,367,172

Source: Nebraska Department of Revenue
Figures in $ thousands, monthly average over the quarter
Numbers in shaded areas are projections

A Qualitative Look at the National Recession and its Impact on the Nebraska Economy

John S. Austin
Research Associate, Bureau of Business Research

Elsewhere in this issue, Sanath Jayanetti and Darnell Smith present a detailed quantitative forecast of the Nebraska economy. This article is designed to present qualitative aspects of the near-term outlook for the national economy and to draw some implications for the Nebraska economy.

War and the Economy

Since the last issue of *Business in Nebraska*, the U.S. and allied nations have taken military actions against Iraq. War events now dominate the outlook for the national economy. We will explore two war scenarios and their likely effects on the economy.

The Short-Shallow Scenario

The most optimistic scenario is the war will be short and oil supplies will remain stable worldwide. This scenario leads to a projection of a short-shallow recession. The short-shallow recession forecast was the consensus forecast before the war and is the one used to generate the latest Bureau of Business Research economic projections for Nebraska.

Even with a short-shallow recession, there will be some stimulus from increased defense purchases to replace spent conventional weapons. As an example, December durable goods orders increased 4.4 percent over November, mainly due to increases in military hardware orders.

One month, however, does not a trend make. It is reasonable to expect that defense spending will increase for at least the next several months. This spending may keep the durable goods orders from collapsing, as we might see normally during a recession.

Another feature of the short-shallow recession is that interest rates, especially short-term interest rates, will remain low. In mid-January, the Federal Reserve took action to lower rates. Currently, the Federal Funds rate, a primary indicator of Federal Reserve policy, is dropping again. On February 1, the Fed lowered the discount rate, the rate it charges banks for short-term loans, to 6 percent.

The discount rate action should be viewed as an indicator of the Fed's intentions more than it should be viewed as a critically important interest rate. Little borrowing occurs at the discount rate. If oil supplies stabilize, it is possible that inflation will cool and that long-term interest rates will remain relatively low.

Low rates are good news for the economy. Another essential factor is the recovery of consumer confidence. In January, the Conference Board series on consumer confidence stood at 54. This figure represents a sharp decrease from the high of 110 in the first part of 1990. Increased consumer confidence is critical to a recovery in consumer spending, especially in such large items as automobile sales.

Stimulating consumer confidence to rebound to prewar levels will require an abundance of good news, both from the war front and from the economic front.

Even the optimistic, short-shallow recession scenario does not indicate that we will return to the rates of growth of prior decades. In the long run, we expect growth rates to be in the 2.5 percent to 3 percent area for the remainder of the 1990s. This range contrasts with the 3.5 percent growth rate that some economist regarded as optimal in the 1970s.

The Long War Scenario

The long war scenario brings a forecast for a long recession. Perhaps a worst case scenario would be an outcome similar to Korea . . . a war that extends for a year or more and ends in a stalemate. A long war more likely would result in damage to oil facilities in Kuwait, Iraq, and Saudi Arabia. As a result of the supply disruptions, oil prices would increase sharply.

Oil price increases would raise costs principally in agriculture, manufacturing, transportation, and construction. These increased costs would work their way into the general price level of our nation's and the world's economies.

Rising oil prices and growing inflation rates would put upward pressure on long-term interest rates. Rising interest rates would dampen the prospect for increased spending in the investment sector, particularly in housing.

The longer the war, the more likely it becomes that we will see some military setbacks. These in turn make rebuilding consumer confidence more difficult.

Not all news from a long war scenario is bad for the economy. There is a stimulating impact from increased defense purchases. Some economic historians argue that the solution to the depression of the 1930s was the war of the early 1940s. Certainly there is no comparison in the likely size of the Iraqi conflict and World War II.

It is unlikely that increased defense purchases for the current war effort would be able to offset major drops in consumer expenditures. In any event, we are not advocating war as a method to stimulate the economy. The human loss cannot be compared to any possible economic gain.

Commonalities in the Scenarios

There are some commonalities between the two different economic scenarios. In both cases, oil prices during the war likely will be volatile. Oil prices on the world markets tend to respond to the latest war news. For example, wholesale oil prices were $18 per barrel for Texas crude intermediate before the

Iraqi invasion in August. Oil prices reached a high of $41 a barrel in October.

Oil price volatility has been the watchword since August. Price movement has been dominated by speculation. Even though the shortfall in oil supply caused by Iraq and Kuwait losses has been offset, price changes in the wholesale markets have been dramatic.

Another commonality is that both scenarios include some stimulus due to the restocking of materials and supplies as well as the replacement of conventional weapons used in the war. Both restocking and replacement will be determined by the extent of the war.

The rebuilding of Kuwait after the war offers the prospect of some further stimulus to the American economy. Kuwait has earmarked $110 billion for infrastructure work. Several large American companies already have been approached by Kuwaiti officials to assist in rebuilding efforts.

Last, both economic scenarios are characterized by little hope for a rapidly growing economy once the recession ends. Instead, we most likely will return to moderate growth rates hovering around 2.5 percent in real terms.

What is the most likely scenario? I don't think anyone can make an intelligent guess at this point.

Paying the War Bill

A major issue in the Middle East conflict is how war costs will be paid. There has been some help from various allies in terms of dollar support for the war effort, but there inevitably will be a bill left for the American public to pay.

Conventional weapons and supplies are being used at unanticipated rates. The revised estimate of the federal deficit for 1991 now exceeds $300 billion. A large part of the revised estimate is due to increased war spending.

The issue we must face is how we will pay for the deficit. In a sense, we can pay for it now in the form of increased taxes or we can pay for it later in terms of increased inflation pressures.

We experienced the latter following the Vietnam War. Large increases in spending for the war and for social programs were not matched by increases in taxes. The result was a buildup of inflationary pressures that did not cool until after we had three recessions.

Many tax options are available. A surtax on the income tax structure may be the most likely alternative. It is a relatively easy way to raise taxes quickly. This method tends to minimize the debate over tax equity issues as well.

More Recession Evidence

In other economic news, the start of the recession at the end of last year was verified by the release of the advance Gross National Product (GNP) report. GNP in the fourth quarter fell 2.1 percent. The exact timing of the start of the recession will not be officially determined until after the recession is finished.

Industrial production dropped 0.6 percent in December. Housing starts dropped in December to 987,000. That figure is extremely low. We must return to the depths of the 1981-1982 recession to find housing starts that low.

As we suspected, retail sales were weak in December. Retail sales dropped 0.4 percent before adjustment for price changes. Retail sales for the year as a whole, 1990 over 1989, increased 3.6 percent. Using the Consumer Price Index (CPI) as a rough guide to changes in retail

Table I
Income and Earnings in Nebraska*
($ millions)

	Third Quarter 1988	Fourth Quarter 1988	First Quarter 1989	Second Quarter 1989	Third Quarter 1989	Fourth Quarter 1989	First Quarter 1990	Second Quarter 1990	Third Quarter 1990	% Change 1990:III vs Yr Ago
Income										
Total Personal Income	22,704	23,734	24,818	24,875	24,554	25,294	26,701	26,741	26,401	7.5
Nonfarm	21,548	22,003	22,543	22,990	23,366	23,799	24,198	24,650	24,947	6.8
Farm	1,156	1,732	2,275	1,885	1,188	1,495	2,503	2,091	1,454	22.4
Earnings by Industry**										
Ag. Services,										
Forestry & Fisheries	134	139	136	143	149	147	155	153	153	2.7
Mining	59	58	56	54	53	55	56	56	60	13.2
Construction	905	945	915	934	919	923	972	963	940	2.3
Manufacturing	2,410	2,438	2,484	2,482	2,495	2,483	2,540	2,597	2,600	4.2
Nondurable	1,194	1,208	1,212	1,234	1,242	1,238	1,212	1,276	1,273	2.5
Durable	1,216	1,230	1,272	1,248	1,253	1,246	1,328	1,320	1,327	5.9
TCU	1,686	1,675	1,737	1,730	1,723	1,738	1,748	1,788	1,794	4.1
Wholesale Trade	1,273	1,295	1,310	1,327	1,334	1,350	1,434	1,428	1,440	7.9
Retail Trade	1,645	1,675	1,694	1,699	1,731	1,749	1,786	1,799	1,811	4.6
FIRE	1,216	1,211	1,242	1,254	1,262	1,314	1,324	1,361	1,395	10.5
Services	3,682	3,792	3,887	3,968	4,075	4,160	4,203	4,351	4,446	9.1
Government	3,048	3,133	3,185	3,256	3,264	3,354	3,396	3,557	3,635	11.4
Federal, Civilian	480	486	501	506	511	516	528	561	579	13.3
Military	404	404	420	417	415	412	421	421	424	2.2
State & Local	2,165	2,243	2,264	2,333	2,338	2,426	2,446	2,576	2,633	12.6

* All data are seasonally adjusted at annual rates
** Earnings is the sum of wages and salaries, other labor income, and income earned by sole proprietors
*** Transportation, Communication, & Utilities
**** Finance, Insurance, & Real Estate
Source: Bureau of Economic Analysis, U.S. Department of Commerce

prices, real retail sales dropped almost 2 percent.

Domestic auto production continued to suffer from low sales levels. The Big Three recently announced first quarter production cuts that will result in production levels that nearly match the low points of the last recession.

The unemployment rate in December rose to 6.1 percent and increased again to 6.2 percent in January. These increases came at the end of almost a vertical ascent that started in June 1990 when the unemployment rate stood at 5.2 percent. Each percentage point of the unemployment rate represents one million persons out of work.

Despite all the recession signals, personal income managed to rise 0.7 percent in December. In light of all bad news about the U.S. economy in December, it is difficult to tell how this feat occurred.

There was good news about inflation in December. The CPI rose 0.3 percent in December, while the Producer Price Index (PPI) dropped 0.6 percent in December. For the year as a whole, however, the CPI rose 5.4 percent and the PPI gained 4.9 percent.

California water shortages and the possibility of higher produce prices will be cause for concern at least until spring. The food component of the CPI will see some increase as a result.

Nebraska Economy

One aspect of the current national economic conditions has a unique impact upon Nebraska. As a general rule, the agricultural cycle and the general business cycle are separate cycles that usually do not coincide. For example, the last recession ended in late 1982, while the agricultural cycle bottomed one year later in 1983. In the present recession, the agricultural cycle will be dropping at about the same time the nation's business cycle reaches its low.

States with large agricultural sectors may suffer from the agricultural downturn more than they will suffer from the recession itself. This most likely will be the case for Nebraska. Unless the recession is longer and deeper than most forecasters currently expect, the nonfarm sector of the Nebraska economy will see little impact from the national recession.

According to F.W. Dodge, the total value of construction contracts in 1990 was 15 percent higher than in 1989. Nonbuilding construction led the pack with an increase of 43 percent. Building construction increased only 7 percent for the year as a whole, with strength concentrated in residential building. Residential construction activity gained 10 percent for the year.

Nebraska received some negative publicity on the release of the third quarter personal income figures developed by the Bureau of Economic Analysis in Washington, D.C. (Table I). Nebraska was one of the few states to show a drop from the second quarter to the third quarter of 1990. This drop was at an annual rate of 5.1 percent.

As usual, changes in Nebraska's personal income data are being driven by changes in the farm income block. Farm income exhibited a single quarter drop of 30 percent, at quarterly rates. Although these data are seasonally adjusted, the farm income series is particularly difficult to adjust. Changes in the timing of agricultural product marketings or the timing of federal government payments to agriculture will cause the net farm income series to jump in either direction.

Perhaps a better indicator is the nonfarm block. Nonfarm income rose 4.8 percent from the second to the third quarter 1990 (seasonally adjusted at annual rates). On the basis of a percentage change from year ago, nonfarm personal income rose 6.8 percent. In the mix of nonfarm income it is difficult to find weaknesses.

All of the sectors showed an increase from year ago levels, although nondurable

Table II
Employment in Nebraska

	Revised November 1990	Preliminary December 1990	December % Change vs. Year Ago
Place of Work			
Nonfarm	741,094	735,551	2.6
Manufacturing	97,335	97,647	1.6
Durables	46,369	46,658	0.2
Nondurables	50,966	50,989	3.0
Mining	1,561	1,392	6.0
Construction	25,483	24,002	5.8
TCU*	47,665	48,246	3.2
Trade	188,982	190,169	1.0
Wholesale	55,114	54,969	1.6
Retail	133,868	135,200	0.7
FIRE**	48,019	48,123	-1.0
Services	176,531	174,975	3.5
Government	155,518	150,997	4.7
Place of Residence			
Civilian Labor Force	838,827	837,173	2.8
Unemployment Rate	1.6	2.0	

* Transportation, Communication, and Utilities
** Finance, Insurance, and Real Estate

Source: Nebraska Department of Labor

Table III
Price Indices

	December 1990	% Change vs. Year Ago	YTD % Change vs. Year Ago
Consumer Price Index - U* (1982-84 = 100)			
All Items	133.8	6.1	5.4
Commodities	126.0	6.6	5.2
Services	142.3	5.7	5.5
Producer Price Index (1982 = 100)			
Finished Goods	121.9	5.7	5.0
Intermediate Materials	116.7	4.2	2.2
Crude Materials	110.5	6.3	5.8
Ag Index of Prices Received (1977 = 100)			
Nebraska	154	-3.1	2.7
Crops	109	-14.8	-8.6
Livestock	182	1.1	8.1
United States	145	-2.7	2.1
Crops	122	-3.9	-3.9
Livestock	166	-2.4	6.8

U* = All urban consumers
Source: U.S. Bureau of Labor Statistics, Nebraska Department of Agriculture

manufacturing and construction did exhibit a drop from the second quarter to the third quarter. We have addressed the issue of the quality of personal income data in a previous issue of *Business in Nebraska*.

Job increases continued to follow the trends for the last year and a half. Jobs increased 2.6 percent from December 1989 to December 1990. The pattern of job increases tends to characterize the Plains states as well as Nebraska.

Perhaps the one area where Nebraska is reflecting national trends is retail sales. Apparently, Nebraskans have shared in the nationwide collapse in consumer confidence. Retail sales excluding automobiles grew 5.2 percent in October 1990. Total retail sales (including automobiles) increased 4.4 percent versus year ago. Thus, slow automobiles sales have retarded Nebraska's net retail sale figures.

On a year-to-date basis, Nebraska's retail sales grew 5 percent versus year ago. Despite that growth rate, Nebraska retail sales have had difficulty keeping up with changes in the general price level as reflected by the 5.4 percent increase we saw for the CPI for all of 1990.

Table IV
City Business Indicators
October 1990 Percent Change from Year Ago

The State and Its Trading Centers	Employment (1)	Building Activity (2)
NEBRASKA	2.3	-1.8
Alliance	1.2	164.9
Beatrice	1.5	70.9
Bellevue	0.7	-55.4
Blair	0.7	-16.0
Broken Bow	-0.8	1114.1
Chadron	11.5	-65.4
Columbus	3.7	-6.3
Fairbury	-0.7	-45.2
Falls City	4.9	97.5
Fremont	5.5	-42.3
Grand Island	3.7	-7.8
Hastings	3.6	134.3
Holdrege	0.4	131.1
Kearney	3.2	81.2
Lexington	5.0	58.2
Lincoln	1.7	-13.1
McCook	0.7	-73.3
Nebraska City	-3.4	-76.7
Norfolk	7.7	-42.5
North Platte	7.6	148.6
Ogallala	6.6	4.5
Omaha	0.7	-4.9
Scottsbluff/Gering	2.6	9.5
Seward	3.6	71.3
Sidney	2.4	492.8
South Sioux City	-1.1	-38.9
York	7.3	276.1

(1) As a proxy for city employment, total employment (labor force basis) for the county in which a city is located is used

(2) Building activity is the value of building permits issued as a spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Cost Index is used to adjust construction activity for price changes

Sources: Nebraska Department of Labor and reports from private and public agencies

Figure I
City Business Index
October 1990 Percent Change from Year Ago

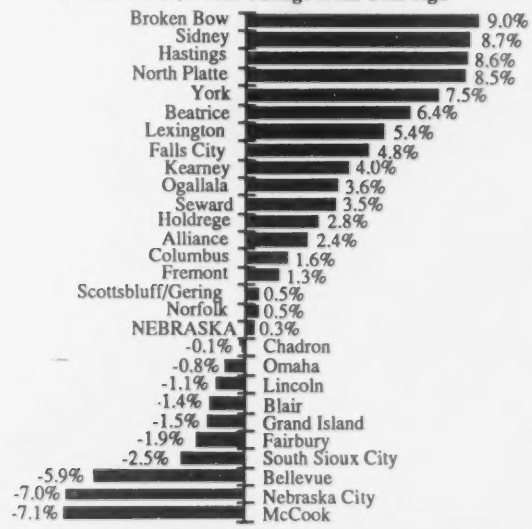
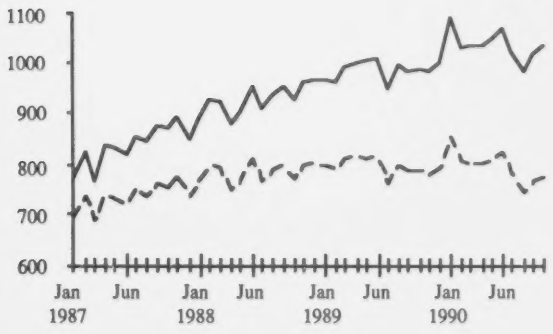


Table V
Net Taxable Retail Sales of Nebraska Regions and Cities

Region Number and City (1)	City Sales (2) October 1990 (000s)	City Sales (2) % Change vs. Year Ago	Region Sales (2) October 1990 (000s)	Region Sales (2) % Change vs. Year Ago	Region Sales (2) YTD % Change vs. Year Ago
NEBRASKA	$890,762	5.2	$1,018,245	4.4	5.0
1 Omaha	301,340	4.7	373,035	3.1	2.5
Bellevue	12,154	1.3	*	*	*
Blair	4,523	4.8	*	*	*
2 Lincoln	117,581	4.0	136,358	3.1	5.5
3 South Sioux City	6,175	7.6	8,036	3.7	23.2
4 Nebraska City	4,147	10.4	18,812	8.5	9.3
6 Fremont	16,778	10.5	30,858	8.6	7.9
West Point	3,038	8.9	*	*	*
7 Falls City	2,404	5.3	9,618	12.9	8.6
8 Seward	4,369	5.2	14,843	4.5	6.9
9 York	6,392	1.5	14,889	6.5	4.4
10 Columbus	15,056	7.5	28,095	8.9	7.0
11 Norfolk	19,533	6.1	34,676	4.1	6.5
Wayne	2,910	-3.1	*	*	*
12 Grand Island	32,933	0.1	47,266	0.7	1.8
13 Hastings	15,756	13.7	24,528	9.3	2.5
14 Beatrice	7,829	14.2	17,589	9.1	11.2
Fairbury	2,843	9.9	*	*	*
15 Kearney	19,430	6.2	27,525	4.7	4.7
16 Lexington	5,751	9.0	15,989	5.4	4.7
17 Holdrege	4,522	3.2	7,947	0.7	5.7
18 North Platte	15,808	8.6	20,454	7.9	6.7
19 Ogallala	5,591	7.9	11,376	8.3	3.3
20 McCook	7,930	4.2	11,463	6.5	6.4
21 Sidney	3,670	4.6	7,570	10.4	3.9
Kimball	1,523	12.6	*	*	*
22 Scottsbluff/Gering	17,587	4.2	24,838	5.4	4.6
23 Alliance	4,877	0.0	13,850	7.1	3.8
Chadron	2,665	6.6	*	*	*
24 O'Neill	4,486	8.5	14,868	2.2	7.0
Valentine	2,744	6.5	*	*	*
25 Hartington	1,742	10.9	9,380	15.4	8.5
26 Broken Bow	3,293	0.4	11,506	2.4	2.7

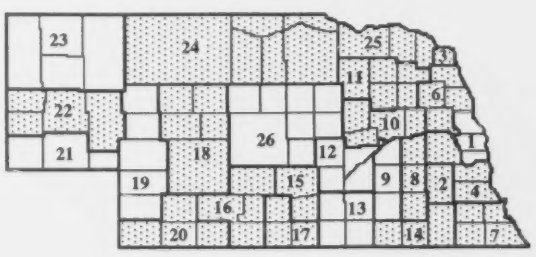
(1) See region map
(2) Sales on which sales taxes are collected by retailers located in the state. Region totals include motor vehicle sales
*Within an already designated region
Compiled from data provided by the Nebraska Department of Revenue

Figure II
Nebraska Net Taxable Retail Sales
(Seasonally Adjusted, $ Millions)



(1) The Consumer Price Index (1982-84 = 100) is used to deflate current dollars into constant dollars. Solid line indicates current dollars; broken line indicates constant dollars

Figure III
Region Sales Pattern
YTD as Percent Change from Year Ago



Shaded areas are those with sales gains above the state average. See Table V for corresponding regions and cities

Nine Nebraska Counties Reach Peak Population

Nine Nebraska counties and the State of Nebraska reached their peak population in 1990, according to data from the Bureau of the Census, U.S. Department of Commerce. Buffalo, Dakota, Douglas, Hall, Lancaster, Madison, Platte, Sarpy, and Washington each contained more persons in 1990 than in prior decennial censuses.

These nine counties, plus Cass County (whose peak population occurred in 1890) are the only counties in the state that show a population increase since the 1980 census. The population increase in these ten counties more than offset the population decrease in the remaining 83 counties by 8,560 persons.

Table 1 shows population counts for 1990 and for the year when peak population occurred. Figure 1 shows the year of peak population and the 1990 population as a percentage of these maximum counts.

Figure 1 shows that seven Nebraska counties reached their peak population threshold to date in 1980, two counties in 1960, one in 1940, 22 in 1930, 17 in 1920, 12 in 1910, 11 in 1900, and 12 in 1890.

Merlin W. Erickson

Figure 1
1990 Census Population as a Percent of Peak Year and Year of Peak Census Population

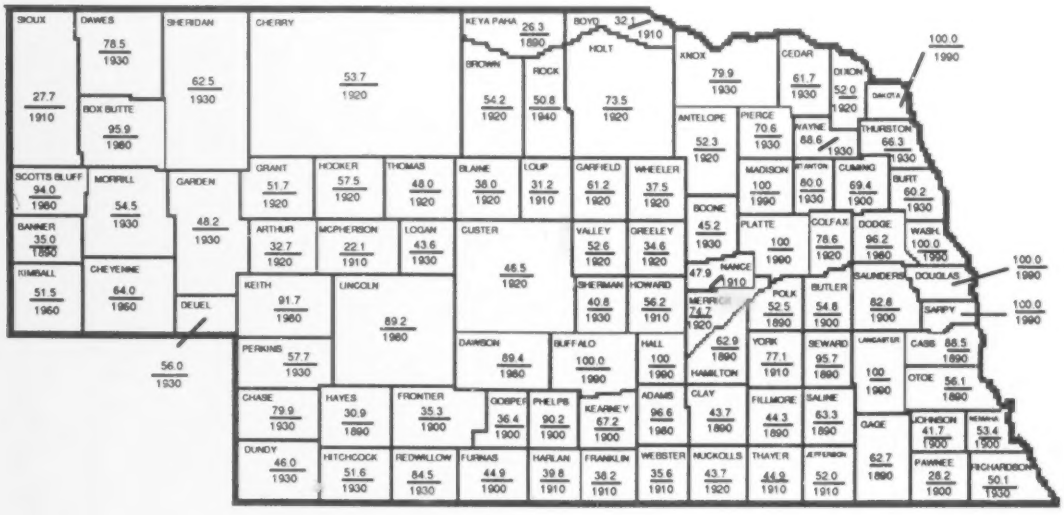


Table 1
Population of Nebraska Counties,
Peak Census Population,
and 1990 Census Population

	Largest Population in a Census Year	Population 1990 Census		Largest Population in a Census Year	Population 1990 Census
Nebraska	1,578,385	1,578,385	Howard	10,783	6,055
Adams	30,656	29,625	Jefferson	16,852	8,759
Antelope	15,243	7,965	Johnson	11,197	4,673
Arthur	1,412	462	Kearney	9,866	6,629
Banner	2,435	852	Keith	9,364	8,584
Blaine	1,778	675	Keya Paha	3,920	1,029
Boone	14,738	6,667	Kimball	7,975	4,108
Box Butte	13,696	13,130	Knox	19,110	9,534
Boyd	8,826	2,835	Lancaster	213,641	213,641
Brown	6,749	3,657	Lincoln	36,455	32,508
Buffalo	37,447	37,447	Logan	2,014	878
Burt	13,062	7,868	Loup	2,188	683
Butler	15,703	8,601	Madison	32,655	32,655
Cass	24,080	21,318	McPherson	2,470	546
Cedar	16,427	10,131	Merrick	10,763	8,042
Chase	5,484	4,381	Morrill	9,950	5,423
Cherry	11,753	6,307	Nance	8,926	4,275
Cheyenne	14,828	9,494	Nemaha	14,952	7,980
Clay	16,310	7,123	Nuckolls	13,236	5,786
Colfax	11,624	9,139	Otoe	25,403	14,252
Cuming	14,584	10,117	Pawnee	11,770	3,317
Custer	26,407	12,270	Perkins	5,834	3,367
Dakota	16,742	16,742	Phelps	10,772	9,715
Dawes	11,493	9,021	Pierce	11,080	7,827
Dawson	22,304	19,940	Platte	29,820	29,820
Deuel	3,992	2,237	Polk	10,817	5,675
Dixon	11,815	6,143	Red Willow	13,859	11,705
Dodge	35,847	34,500	Richardson	19,826	9,937
Douglas	416,444	416,444	Rock	3,977	2,019
Dundy	5,610	2,582	Saline	20,097	12,715
Fillmore	16,022	7,103	Sarpy	102,583	102,583
Franklin	10,303	3,938	Saunders	22,085	18,285
Frontier	8,781	3,101	Scotts Bluff	38,344	36,025
Furnas	12,373	5,553	Seward	16,140	15,450
Gage	36,344	22,794	Sheridan	10,793	6,750
Garden	5,099	2,460	Sherman	9,122	3,718
Garfield	3,496	2,141	Sioux	5,599	1,549
Gosper	5,301	1,928	Stanton	7,809	6,244
Grant	1,486	769	Thayer	14,775	6,635
Greeley	8,685	3,006	Thomas	1,773	851
Hall	48,925	48,925	Thurston	10,462	6,936
Hamilton	14,096	8,862	Valley	9,823	5,169
Harlan	9,578	3,810	Washington	16,607	16,607
Hayes	3,953	1,222	Wayne	10,566	9,364
Hitchcock	7,269	3,750	Webster	12,008	4,279
Holt	17,151	12,599	Wheeler	2,531	948
Hooker	1,378	793	York	18,721	14,428

Selected Recent Highway Statistics for Nebraska

According to *Highway Statistics, 1989*, prepared by the Federal Highway Administration, nearly 943.2 million gallons of motor fuel were consumed for highway use in Nebraska in 1989. A comparable estimate for 1990 is about 949 million gallons, representing an increase of 0.6 percent.

The report also shows that 1989 motor vehicle registrations in Nebraska totalled 1,361,724. It is estimated that registrations will increase approximately 1.9 percent in 1990. Automobiles account for about 62 percent of motor vehicles; trucks and buses (including pickups, vans, etc.) make up the remaining 38 percent. Motorcycle registrations show a decline for the period.

Valid Nebraska drivers' licenses totalled 1,064,796 in 1989. The 1990 estimate is 1,081,000, an increase of about 1.0 percent.

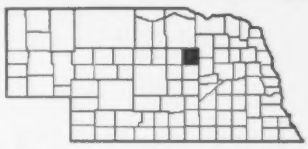
The following list summarizes the relationships between population, drivers, vehicles, fuel, and travel in Nebraska, and the U.S., in 1989:

	Nebraska	U.S.
Licensed drivers per 1,000 resident population	661	668
Registered motor vehicles per 1,000 residents	845	756
Licensed drivers per registered motor vehicle	0.78	0.88
Persons per registered motor vehicle	1.18	1.32
Gallons of fuel per vehicle	693	704
Miles per gallon	14.61	15.98
Annual miles per vehicle	10,120	11,252
Vehicle miles per capita	8,554	8,502
Vehicle miles per licensed driver	12,942	12,727

Merlin W. Erickson

County of the Month

Wheeler



Bartlett—County Seat

License plate prefix number: 84
Size of county: 576 square miles, ranks 52nd in the state
Population: 948 in 1990, a change of -10.6 percent from 1980
Median age: 28.6 years in Wheeler County, 29.7 years in Nebraska in 1980
Per capita personal income: $28,917 in 1988, ranks 1st in the state
Net taxable retail sales ($000): $2,517 in 1989, a change of 4.4 percent from 1988; $2,324 during January through October 1990, a change of 9.6 percent from the same period one year ago
Number of business and service establishments: 15 in 1988; 47 percent had less than five employees
Unemployment rate: 1.6 percent in Wheeler County, 3.1 percent in Nebraska for 1989
Nonfarm employment (1989):

	State	Wheeler County
Wage and Salary Workers	705,672	160
	(percent of total)	
Manufacturing	13.4%	—
Construction and Mining	3.6	*
TCU	6.5	*
Retail Trade	18.5	7.5
Wholesale Trade	7.6	16.3
FIRE	6.8	*
Services	23.7	*
Government	19.9	67.5
Total	100.0%	100.0%

Agriculture:
Number of farms: 213 in 1987, 195 in 1982
Average farm size: 1,330 acres in 1987
Market value of farm products sold: $119.1 million in 1987 ($559,008 average per farm)

Sources: U.S. Bureau of the Census, U.S. Bureau of Economic Analysis, Nebraska Department of Labor, Nebraska Department of Revenue

*Data not available due to disclosure suppression

Merlin W. Erickson

Business in Nebraska

PREPARED BY BUREAU OF BUSINESS RESEARCH
Association for University Business & Economic Research

Business in Nebraska is issued as a public service and mailed free of charge upon request to 200 CBA, University of Nebraska-Lincoln, Lincoln, NE 68588-0406. Copyright 1991 by Bureau of Business Research, University of Nebraska-Lincoln. ISSN 0007-683X.

February 1991, Volume 46 No. 557

University of Nebraska-Lincoln—Jack Goebel, *Interim Chancellor*
College of Business Administration—Gary Schwendiman, *Dean*

Bureau of Business Research
John S. Austin, *Research Associate*
Carol Boyd, *Staff Secretary*
David DeFruiter, *Information Systems Coordinator*
Merlin W. Erickson, *Research Associate*
F. Charles Lamphear, *Director*
Lisa Valladao *Staff Secretary*
Margo Young, *Communications Associate*

The University of Nebraska-Lincoln does not discriminate in its academic, admission, or employment programs and abides by all federal regulations pertaining to same.

Nonprofit Org.
U.S. Postage
PAID
Lincoln, Nebraska
Permit No. 46

#A1128
CONGRESSIONAL INFO SERVICE
SRI
4520 EAST/WEST HIGHWAY
BETHESDA, MD 20814